

The bioinformatics lab

Webserver

# Outline

- VI exam
- Presentation of results from last week (DNS & Mail)
- Short presentation about webserver
- Starting the programming challenge
- Unfortunately we have to leave at 4

# VI EXAM

- You have 15 minutes time
- Run vintutor
- Do ONLY the following parts:
  - $1.5 + 1.6$
  - $2.2 - 2.6$
  - $3.1 - 3.4$
  - $4.2 + 4.4$
  - $6.2 + 6.3$
- Save the file in YOURNAME.txt
- Send the result by email to [schmidb@roslab.org](mailto:schmidb@roslab.org)
- The latest result before 14:XX will be used!

# Presentation of results from last week

- DNS & Mail
- Fabian Grandke

# Webserver

- A "Webserver" = programm
- Accepts HTTP-protcoll requests
  - e.g. from a webbrowser by the internet
- And sends some data back
  - Which are valid for the requested URL
- Data can be
  - Static (file)
  - Or dynamic (ouput from some program)

# W3 demon

- The first webserver
- 1989 implemented by Tim Berners-Lee
- Today hundreds of different webserver implementations.
- Main differences:
  - Speed
  - Stability
  - Extendability
  - Supported operation system

# Debian Webserver

- aolserver AOL Web Server 3 (Program)
- aolserver4 AOL Web Server 4 (Program)
- apache versatile, high-performance HTTP server
- apache2 next generation, scalable, extendable web server
- boa Lightweight and high performance webserver
- caudium An extensible webserver written in Pike
- dhttpd minimal secure webserver without cgi-bin support
- micro-httpd A really small http server
- roxen4 The Roxen Challenger Webserver
- thttpd tiny/turbo/throttling HTTP server
- webfs a lightweight web server for static content
- zope open source web application server

# Apache

- Open-Source-Software
- Works efficient and stable
- Modular implementation
  - Very extensible
- about 60% of all webserver use Apache
- [http://de.wikipedia.org/wiki/Apache\\_HTTP\\_Server](http://de.wikipedia.org/wiki/Apache_HTTP_Server)
- <http://httpd.apache.org>

# Today's programming

- Install and configure Apache2
  - Https
  - Modules and php
  - Access control
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- See hints and tips in the owiki

# https

- "https" is a protocol which combines "http-over-SSL".
  - The browser creates a ssl connection to the TCP-Port (usual port 443) of the webserver
  - And uses this for http communication
- A SSL connection is good for
  - Privacy
  - Integrity
  - Authenticity
- [http://de.wikipedia.org/wiki/Transport\\_Layer\\_Security](http://de.wikipedia.org/wiki/Transport_Layer_Security)